Senior Civil Engineer

General Information	
Classification Code:	MGRAPR
Effective Date:	July 12, 2022
Pay Grade:	C45
FLSA Status:	Exempt

Position Summary

The Senior Civil Engineer performs work independently with limited supervision and is responsible for carrying out complex assignments that have a greater scope of responsibility. Manages multiple projects that involve complicated risk management and complex public processes. Provides professional expertise, guidance, and trains other licensed engineers and staff. Performs other duties of a similar nature or level.

Classification Characteristics

The Associate Program Manager is a professional level classification responsible for managing a technical or administrative program area, including the development of medium and long-term development, public improvement, or strategic plans consistent with the goals and priorities established at higher levels. Responsibilities will vary in accordance with assigned area of responsibility and may include assisting with or independently establishing project deliverables and timelines within the scope established at higher levels, assisting with the development and administration of functional budgets, developing and implementing compliance plans, developing policy proposals and actions for consideration by Planning Commission or/and City Council, represent the City to and negotiate with private land owners and developers, and their professional consultants, and designing operational systems related to area of assignment. Acts as technical and policy advisor to other personnel performing difficult assignments. May assign and evaluate work projects and activities.

Senior Civil Engineer is distinguished from the Civil Engineer series in that employees in this class perform the most complex level of work. Operates independently, receiving guidance relating to overall objectives, critical issues, and policy matters. Projects are highly visible and can be political in nature. It is distinguished from the Managing Civil Engineer class in that employees in the higher class have oversight and are responsible for managing and delivering one or more engineering programs and supervise assigned professional engineers, professionals, technical, non-technical, and paraprofessional staff within the program. Managers provide program guidance, set goals and objectives, and decide how best to utilize assigned resources.

Essential Duties

The duties listed below are a typical sample; position assignments may vary.

1	All duties assigned to Civil Engineer II.
2	Assists leadership in addressing engineering challenges, standards and specifications, amendments, and other items to achieve consistency in application of land use or/and engineering requirements in the City of Springfield. Includes collaborative master planning and facility planning efforts, engineering project management, planning, design, and design review.

Essential Duties	
3	Acts as liaison with other city divisions and departments, outside agencies, business and community representatives, and other organizations. Ensures City's interests are addressed, notifies public/businesses of construction projects, handles controversial issues, assists in resolving conflicts, answering questions and complaints, and providing technical assistance. Discusses project impacts directly with affected property owners, tenants, and business owners.
4	Manages civil engineering projects, including design, construction, engineering, right-of-way, water, stormwater, sanitary sewer, and roadway; manages transportation engineering and facility planning projects, inspects work site, analyzes complex issues, develops recommendations, and implements solutions; duties may vary according to job assignment.
5	Reviews, approves, and affixes professional engineering seal to construction drawings, studies, reports, and/or plans. Applies technical knowledge to contain risk to the public and reduce tort liability.
6	Recommends revision and adoption of City Ordinances, policies, specifications, manuals, etc. related to focus area. Reviews and makes technical engineering analyses of projects and proposals; evaluates need for design changes and makes appropriate recommendations; reviews plans for conformity to uniform codes, local ordinances, and State and Federal regulations.
7	Responds to inquiries, complaints, or requests for information regarding assigned projects from other departments, agencies, and the public; provides information and resolves concerns regarding City requirements and processes. Prepares and delivers presentations for public meetings, user groups, neighborhood associations and City Council related to the area of responsibility.
8	Forms project specific steering committees; schedules meetings and coordinates input from a variety of outside interests. Coordinates with citizen groups, advisory boards, commissions, and outside agencies; interprets and explains City policies, procedures, rules, and regulations; investigates and responds to citizen concerns and complaints as related to traffic and transportation issues
9	Serves on the planning project team during the planning portion of assigned projects. Participates in local and regional infrastructure planning processes. Reviews consultant work product, requires changes and corrections, and approves of final work product. Attends various meetings; delivers presentations as required.
10	Represents the City of Springfield through excellence in internal and external customer service, has a deep understanding of community needs and political realities, maintains a positive customer service demeanor, and delivers service in a prompt, respectful, and patient manner with creative problem resolutions. Maintains a positive attitude promoting a positive working environment.
11	Supports the relationship between the City and the constituent population by demonstrating courteous and cooperative behavior when interacting with clients, visitors, and City staff; promotes City goals and priorities in compliance with all policies and procedures. Maintains confidentiality of work-related issues, client records, and City information.
12	Performs other duties of a similar nature or level.

Functional Specific Responsibilities

Capital Projects – Performs a variety of professional engineering work in design, planning and construction of public works projects including street, wastewater, stormwater, and transportation improvements. Serves as senior project engineer and project manager for the planning design and/or delivery of multiple City-funded and federally funded projects. Administers City and outside agency contracts; designs and manages capital projects; manages and is involved in the public outreach process of assigned projects; and manages project budgets.

Traffic – Performs a variety of professional engineering work in the formulation and implementation of the City's transportation plans, engineering, and traffic operations. Conducts and reviews traffic engineering studies and privately engineered plans; reviews land-use engineering plans for commercial, industrial, and residential structures related to traffic and transportation; engages with community members and applicants resolving conflicts and represents the City in these activities. Traffic is concerned with designing transportation systems that are efficient in functioning and sustainable.

Qualifications

Minimum Qualifications:

- Bachelor's degree in a related field and 7-10 years of increasingly responsible experience in civil engineering, leading, and managing multiple projects simultaneously that involve complex risk management and public processes.

Licensing/Certifications:

- Registration as a Professional Engineer, in a relevant practice area (e.g., Civil, Environmental, Electrical) in the State of Oregon, or the ability to obtain Oregon registration, within twelve (12) months of appointment.
- Valid Driver's License in the State of Oregon.

Technology Skills:

- Calendar and scheduling software — Scheduling software
- Computer aided design CAD software — Autodesk AutoCAD Civil 3D; Autodesk Revit
- Data base user interface and query software — Data entry software; Microsoft Access
- Document management software — Adobe Systems, Laserfiche
- Electronic mail software — Email software; Microsoft Exchange; Microsoft Outlook
- Internet browser software — Microsoft Internet Explorer; Web browser software
- Office suite software —Microsoft Office
- Presentation software — Microsoft PowerPoint
- Project management software — Cost estimating software; Microsoft Project
- Spreadsheet software — Microsoft Excel
- Word processing software — Microsoft Word
- Transportation analysis software – Highway Capacity Manual, Syncro, Lighting design products, etc.

Knowledge Required:

- Design — Knowledge of design techniques, tools, and principles involved in production of technical plans, drawings, and models.
- Engineering and Technology — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.
- Construction Processes — Knowledge of construction processes, quality control, costs, and other techniques for construction.
- Construction — Knowledge of materials and methods involved in the construction of City structures such as roads, sanitary and stormwater sewers, stormwater facilities, .
- Mathematics — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.
- English Language — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
- Administration and Management — Knowledge of business and management principles involved in strategic planning, resource allocation, leadership technique, production methods, and coordination of people and resources.
- Customer and Personal Service — Knowledge of principles and processes for providing customer services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.
- Law and Government — Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.
- Public Safety and Security — Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.
- Computers – Knowledge of computer software applications.
- Physics — Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid and material dynamics.

Qualifications

Skills:

- Active Listening — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.
- Complex Problem Solving — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.
- Critical Thinking — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.
- Reading Comprehension — Understanding written sentences and paragraphs in work related documents.
- Respectful Speaking — Talking to others to convey information effectively in a respectful manner.
- Systems Analysis — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.
- Time Management — Managing one's own time and the time of others.
- Operations Analysis — Analyzing needs and product requirements to create a design.
- Judgment and Decision Making — Considering the relative costs and benefits of potential actions to choose the most appropriate one.
- Active Learning — Understanding the implications of new information for both current and future problem-solving and decision-making.
- Monitoring — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.
- Writing — Communicating effectively in writing as appropriate for the needs of the audience.
- Systems Evaluation — Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.
- Instructing — Teaching others how to do something.
- Negotiation — Bringing others together and trying to reconcile differences.

Abilities:

- Inductive Reasoning — The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).
- Oral Comprehension — The ability to listen to and understand information and ideas presented through spoken words and sentences.
- Oral Expression — The ability to communicate information and ideas in speaking so others will understand.
- Problem Sensitivity — The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
- Written Comprehension — The ability to read and understand information and ideas presented in writing.
- Written Expression — The ability to communicate information and ideas in writing so others will understand.
- Information Ordering — The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).
- Mathematical Reasoning — The ability to choose the right mathematical methods or formulas to solve a problem.
- Category Flexibility — The ability to generate or use different sets of rules for combining or grouping things in different ways.
- Near Vision — The ability to see details at close range (within a few feet of the observer).
- Number Facility — The ability to add, subtract, multiply, or divide quickly and correctly.
- Visualization — The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.
- Far Vision — The ability to see details at a distance.
- Speech Clarity — The ability to speak clearly so others can understand you.
- Speech Recognition — The ability to identify and understand the speech of another person.
- Selective Attention — The ability to concentrate on a task over a period of time without being distracted.

Physical Requirements												
Key	None 0% (0 hrs.)		Seldom 1-10% (Up to 1 hrs.)		Occasionally 11-35% (Up to 3 hrs.)		Frequently 36-75% (3-6 hrs.)		Continuous 76-100% (6+ hrs./day)			
	0%	**1-10%**	**11-35%**	**36-75%**	**76-100%**		**0%**	**1-10%**	**11-35%**	**36-75%**	**76-100%**
BODY POSITIONS						**PUSH/PULL**					
Standing			X			0-10 lbs.			X		
Sitting				X		11-20 lbs.		X			
Walking – Even Surface			X			21-50 lbs.	X				
Walking – Uneven Surface			X			51-75 lbs.	X				
Kneeling		X				76-100 lbs.	X				
MOVEMENTS						**ENVIRONMENTAL HAZARDS**					
Bending/Stooping		X				Indoors					X
Twisting	X					Outdoors		X			
Crawling	X					Dust		X			
Squatting/Crouching		X				Fumes/Odors/Gasses	X				
Balancing	X					Chemical Agents	X				
Reach – Overhead	X					Biological Agents	X				
Reach – Forward		X				Noise – Low	X				
Reach – Backward	X					Noise – Moderate		X			
Climbing – stairs	X					Noise – High		X			
Climbing - ladder	X					Low Light	X				
USE OF HANDS						Heat		X			
Grasping – whole hand		X				Cold		X			
Grasping – pinch grip			X			Restricted workspace	X				
Fine manipulation/feeling			X			Vibration – whole body	X				
Keyboarding				X		Vibration - extremity	X				
LIFT/CARRY						**JOB SPECIFIC**					
0-10 lbs.			X			Driving – vehicle/equipment		X			
11-20 lbs.		X				Operate foot controls					
21-50 lbs.	X					Seeing					X
51-75 lbs.	X					Talking			X		
76-100 lbs.	X					Hearing			X		
						Extended work hours		X			

Classification History

2012.07 Created; Modified 2014.07
2016.04 Revisions by HR
2022.07 Revisions, reformatted, retitled by HR. Previous revisions made to Principal Engineer/Associate ProgramManager.

I have reviewed the job description.

Employee: Name_____ Signature _____ Date _____